IN THE CLAIMS:

Please amend claims 1-12, and add new claims 13-18 as follows:

1. (Currently Amended) A magnetic disk storage system comprising:

a first motor which rotates a magnetic disk;

a first motor drive circuit which rotatably drives the first motor;

a magnetic head which ~~effects~~ reads [[of]] information on a storage track on the magnetic disk and is adapted to make smaller a gap between the magnetic head and a surface of the magnetic disk as the rotational speed of the first motor increases;

a second motor which moves the magnetic head [[over]] above the magnetic disk;

a boost circuit which boosts a voltage which is generated by rectifying a first back electromotive force of the first motor, so as to generate a first voltage when a first power supply to the magnetic disk storage system is interrupted;

a second motor drive circuit which ~~rotatably~~ drives the second motor in accordance with a control of a drive control circuit by using the first voltage as a second power supply to the second motor drive circuit when the first power supply to the magnetic disk storage system is interrupted; [[and]]

a central processing unit which supplies the drive control circuit with a first current command value for the second motor drive circuit by using the voltage as a third power supply to the central processing unit so as to perform a retract control, said retract control including shifting the magnetic head to a standby position when the first power supply to the magnetic disk storage system is interrupted; and

[[a]] the drive control circuit which controls ~~currents caused to flow through coils of the first and second motors by the first motor drive circuit and~~ the second motor drive circuit in accordance with the first current command value by using the first voltage as the second power supply to the drive control circuit when the first power supply to the magnetic disk storage system is interrupted~~;~~

~~wherein, upon loading the magnetic head from a standby position to the surface of the magnetic disk, the drive control circuit makes a rotational speed of the first motor slower than a rotational speed at a normal operation~~.

2. (Currently Amended) The magnetic disk storage system according to claim 1, wherein when the first power supply to the magnetic disk storage system is interrupted, the drive control circuit causes the first motor drive circuit to perform a stepup converter operation by the drive control circuit supplying the first motor drive circuit with each of drive voltages having an amplitude value which is smaller than a value of the first back electromotive force of each of three phases of the first coil and is synchronized with the first back electromotive force of each of three phases of the first coil, so as to generate the voltage ~~upon power shutoff to thereby perform power conversion into a DC voltage higher than an amplitude value of each of three-phase back electromotive voltages (B-EMF: Back-electromotive force) developed by rotation of the first motor, and operates the magnetic head at the DC high voltage to move the magnetic head to a predetermined standby position~~.

3. (Currently Amended) The magnetic disk storage system according to claim 2, ~~further comprising a system control device which supplies a command to the drive control circuit,~~

~~wherein the drive control circuit controls a current flowing through each of coils of the first motor in accordance with a current command value sent from the system control device to thereby control the rotational speed of the first motor, and upon the power shutoff, operates the system control device by a high voltage taken out of the back electromotive voltages in accordance with the stepup converter operation of the first motor drive circuit~~

wherein when the first power supply to the magnetic disk storage system is interrupted and the second motor drive circuit has shifted the magnetic head to the standby position, the first motor drive circuit stops a rotation of the first motor by the drive control circuit controlling the first motor drive circuit in accordance with the central processing unit supplying the drive control circuit with an instruction signal for stopping the rotation of the first motor.

4. (Currently Amended) The magnetic disk storage system according to claim 3,

~~wherein the drive control circuit detects the phase of the back electromotive voltage developed in each of the coils of the first motor and applies a voltage amplitude larger than an amplitude of the back electromotive voltage to each of the coils of the~~

~~first motor in synchronism with the back electromotive voltage to thereby rotatably drive the motor, and applies a voltage amplitude smaller than the amplitude of the back electromotive voltage to each of the coils of the first motor in synchronism with the back electromotive voltage developed in each of the coils of the first motor, to thereby allow the first motor to execute the stepup converter operation~~

wherein, ~~upon loading~~ when the magnetic head is loaded from the standby position to the surface of the magnetic disk, the drive control circuit makes a rotational speed of the first motor slower than a rotational speed of the first motor at normal operations which includes a seek operation for shifting the magnetic head to a predetermined storage track,

wherein when the normal operations are performed, the drive control circuit controls a rotational speed of the first motor in accordance with a second current command value for the first motor drive circuit from the central processing unit by supplying the first motor drive circuit with each of drive voltages having an amplitude value which is higher than a value of the first back electromotive force of each of three phases of the first coil and is synchronized with the first back electromotive force of each of three phases of the first coil.

5. (Currently Amended) The magnetic disk storage system according to claim 3, wherein the drive control circuit includes an error amplifier which amplifies a potential difference between the voltage generated by the stepup converter operation of the first motor and a predetermined control voltage, and the drive control circuit applies ~~a voltage amplitude~~ each of the drive voltages corresponding to an output of the error amplifier to ~~each of the coils of~~ the first motor drive circuit when the first power supply to the magnetic disk storage system is interrupted ~~upon the power shutoff~~, to thereby allow the first motor drive circuit to perform the stepup converter operation.

6. (Currently Amended) The magnetic disk storage system according to claim 5,

further comprising a circuit,

wherein the second current command value is a digital value, [[a]] the circuit is provided which reproduces currents flowing through the respective phase coils of the first motor to respectively proportional values ~~respectively proportional~~ to phase coil currents of three phases of the first motor from a voltage value detected by a resistor,

and the drive control circuit applies a voltage corresponding to ~~an output of~~ a comparison result between the second current command value and each of the currents reproduced values to the first motor drive circuit ~~each of the coils of the first motor upon~~ when ~~the~~ normal operations, which includes a seek operation for shifting the magnetic head to a predetermined storage track, is performed and applies a voltage corresponding to the output of the error amplifier to the first motor drive circuit when the first power supply to the magnetic disk storage system is interrupted ~~each of the coils of the first motor upon the power shutoff~~.

7. (Currently Amended) The magnetic disk storage system according to claim 1, wherein the first motor drive circuit includes transistors that cause currents to flow through the first coils of the first motor, and the drive control circuit carries out on/off-control of the transistors according to a pulse width control ~~system~~.

8. (Currently Amended) The magnetic disk storage system according to claim 7, wherein when normal operations, which includes a seek operation for shifting the magnetic head to a predetermined storage track, is performed, the boost circuit boosts a source voltage of the magnetic disk storage system to generate the first voltage supplied to the first motor drive circuit, the second motor drive circuit and the device control circuit ~~further comprising a boost circuit which steps up a power supply voltage or the voltage generated by the stepup converter operation of the first motor drive circuit~~,

~~wherein the first motor drive circuit includes circuits which generate signals for turning on and off the transistors by the boost voltage generated by the boost circuit~~.

9. (Currently Amended) The magnetic disk storage system according to claim 1,

further comprising a back electromotive ~~voltage~~ force phase detecting [[means]] circuit which detects the first back electromotive voltage ~~developed~~ induced in each of three phase of the first coils of the first motor so as to determine an energized phase coil of the first motor.

wherein the first motor drive circuit is driven in accordance with a detection result of the back electromotive force phase detecting circuit ~~the system control device generates a voltage command value having a voltage amplitude corresponding to the~~

~~current instructions in synchronism with the back electromotive voltage detected by the back electromotive voltage detecting means and supplies the voltage command value to the drive control circuit~~.

10. (Currently Amended) The magnetic disk storage system according to claim 1, wherein when normal operations which includes a seek operation for shifting the magnetic head to a predetermined storage track is performed, the central processing unit supplies the drive control circuit with a second current command value for the first motor drive circuit and the first current command value and controls the magnetic disk storage system and the drive control circuit controls the first motor drive circuit and the second motor drive circuit in accordance with the first and second command values ~~the magnetic head is comprised such that a gap with respect to the surface of the magnetic disk becomes small as the rotational speed of the first motor increases~~.

11. (Currently Amended) A magnetic disk storage system comprising:

a first motor which rotates a magnetic disk;

a first motor drive circuit which rotatably drives the first motor;

a magnetic head which ~~effects~~ reads [[of]] information on a storage track on the magnetic disk and is adapted to make smaller a gap between the magnetic head and a surface of the magnetic disk as the rotational speed of the first motor increases;

a second motor which moves the magnetic head [[over]] above the magnetic disk;

a boost circuit which boosts a voltage which is generated by rectifying a first back electromotive force of the first motor, so as to generate a first voltage when a first power supply to the magnetic disk storage system is interrupted;

a second motor drive circuit which ~~rotatably~~ drives the second motor in accordance with a control of a drive control circuit by using the first voltage as a second power supply to the second motor drive circuit when the first power supply to the magnetic disk storage system is interrupted; [[and]]

a central processing unit which supplies the drive control circuit with a first current command value for the second motor drive circuit by using the voltage as a third power supply, so as to perform a retract control, said retract control including shifting the magnetic head to a standby position when the first power supply to the

magnetic disk storage system is interrupted; and

[[a]] the drive control circuit which controls ~~currents caused to flow through coils of the first and second motors by the first motor drive circuit and~~ the second motor drive circuit in accordance with the first current command value by using the first voltage as the second power supply to the drive control circuit when the first power supply to the magnetic disk storage system is interrupted,

wherein, ~~upon loading~~ when the magnetic head is loaded from [[a]] the standby position to the surface of the magnetic disk, the drive control circuit makes a rotational speed of the first motor slower than a rotational speed at the time that the magnetic head moves [[over]] above the surface of the magnetic disk.

12. (Currently Amended) The magnetic disk storage system according to claim 11, wherein the normal operations includes an operation for fixing the magnetic head to a prescribed storage track thereof, and

wherein the standby position is outside of the magnetic disk ~~the drive control circuit causes the first motor drive circuit to perform a stepup converter operation upon power shutoff to generate a DC voltage higher than an amplitude value of each of three-phase back electromotive voltages (B-EMF: Back electromotive force) developed by rotation of the first motor, and operates the magnetic head at the DC high voltage to move the magnetic head to a predetermined standby position~~.

13. (New) A magnetic disk storage system comprising:

a first motor which rotates a magnetic disk;

a first motor drive circuit which drives the first motor;

a second motor which moves the magnetic head;

a second motor drive circuit which drives the second motor;

a magnetic head being adapted to make smaller a gap between the magnetic head and a surface of the magnetic disk as a rotational speed of the first motor increases; and

a central processing unit which controls the first motor drive circuit and the second motor drive circuit by using a voltage which is generated by rectifying a first back electromotive force of the first motor so as to perform a retract control, said retract control including shifting the magnetic head to a standby position when a first

power supply to the system is interrupted.

14. (New) The magnetic disk storage system according to claim 13, wherein when the first power supply to the system is interrupted and the second motor drive circuit has shifted the magnetic head to the standby position, the first motor drive circuit stops a rotation of the first motor in accordance with an instruction signal for stopping the rotation of the first motor from the central processing unit.

15. (New) The magnetic disk storage system according to claim 13,

wherein, when the magnetic head is loaded from the standby position to the surface of the magnetic disk, the drive control circuit makes a rotational speed of the first motor slower than a rotational speed of the first motor at normal operations which include a seek operation for shifting the magnetic head to a predetermined storage track, and

wherein when the normal operations are performed, the central processing unit controls a rotational speed of the first motor.

16. (New) The magnetic disk storage system according to claim 13, wherein the first motor drive circuit includes transistors that cause currents to flow through first coils of the first motor and carries out on/off-control of the transistors according to a pulse width control.

17. (New) The magnetic disk storage system according to claim 13, further comprising a back electromotive force phase detecting circuit which detects a first back electromotive voltage of the first motor induced in each of three phase of first coils of the first motor so as to determine an energized phase coil of the first motor,

wherein the first motor drive circuit is driven in accordance with a detection result of the back electromotive force phase detecting circuit.

18. (New) The magnetic disk storage system according to claim 13, further comprising a boost circuit which boosts the voltage to generate a boost voltage to be supplied to the

first motor drive circuit and the second motor drive circuit when the first power supply to the system is interruption.